

**AMENDMENTS TO THE SPECIFICATION**

**Replace pages 1-47 with the enclosed clean copy of the Substitute Specification, enclosed at Tab 2.**

**Insert the following Abstract as a new page immediately after the Claims.**

**ABSTRACT**

This invention provides methods for the screening and identification of agents having potent effects on the progression of the cell cycle. In one embodiment, the methods involve contacting a polymerized microtubule with a microtubule severing protein or a microtubule depolymerizing protein in the presence of an ATP or a GTP and a test agent; and (ii) detecting the formation of tubulin monomers, dimers or oligomers. The p60 subunit of katanin provides a particularly preferred microtubule severing protein possessing both ATPase and microtubule severing activities.